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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/697,087	10/31/2003	Koji Ota	117650	9732
25944	7590	09/29/2004	EXAMINER	
OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320			GUSHI, ROSS N	
			ART UNIT	PAPER NUMBER
			2833	

DATE MAILED: 09/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/697,087	<b>Applicant(s)</b> OTA ET AL.	
	<b>Examiner</b> Ross N. Gushi	<b>Art Unit</b> 2833	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 9/17/04
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3,5-7,9-11 and 13-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3,5-7,9-11 and 13-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some    \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-3, 5-7, 9-11, and 13-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In particular, the term "most of its content being titanium" is indefinite. It is indefinite whether what is being compared is volume, mass, number of atoms (chemical structure) or something else. The limitation is treated as meaning that the titanium component of the material has the greatest mass.

Regarding claim 16, the term "stripe clad" is indefinite and given little weight. What is "stripe clad?"

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 13, 14, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bellamy et al. ("Bellamy") in view of Wutz. Regarding claims 1, 2, 13, Bellamy discloses an arc resistant terminal including a final contact portion 13 made of arc resistant material. Bellamy states that: "Such a resistance layer can be provided by

Art Unit: 2833

precious metal thick-films, which are commercially available in the art. The preferred embodiment of the invention utilizes thick-film palladium gold . . . .” Bellamy Col. 3, lines 35-45. Wutz discloses a coating material 4 consisting of pure titanium. Wutz Col. 1, line 60. At the time of the invention, it would have been obvious to replace the Palladium resistance layer in Bellamy with other known precious metal layers, such as a titanium as suggested by Wutz. The suggestion or motivation for doing so would have been to use a material that is corrosion resistant as taught in Wutz. Furthermore, the selection of a known material based on its suitability for its intended purpose would have been obvious. Sinclair & Carroll Col. V. Interchemical Corp., 65 USPQ 297 (1945); In re Leshin, 227 F.2d 197 (CCPA 1960).

Per claim 3, the Bellamy base material is copper.

Regarding claims 14, 15, and the choice of alloy for the terminal, at the time of the invention, it would have been obvious to substitute any number of well known conductive alloys for the metal disclosed. The selection of a known material based on its suitability for its intended purpose would have been obvious. Sinclair & Carroll Col. V. Interchemical Corp., 65 USPQ 297 (1945); In re Leshin, 227 F.2d 197 (CCPA 1960).

Claims 5, 6, 7, 16, 17, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bellamy et al. (“Bellamy”) in view of Wutz as in claims 1-3 in view of Hayashi et al. (“Hayashi”) and Cowie et al. (“Cowie”).

Regarding claim 5, Bellamy does not disclose that both terminals include the resistant area. Hayashi and Cowie both disclose that both terminals of a mating pair of terminals may be include corrosion or abrasion resistant contacting portions which

Art Unit: 2833

prevent damage to the remainder of the terminal (see Hayashi col. 2 lines 55-65, Cowie col. 5, lines 5-15). At the time of the invention, it would have been obvious to include arc suppressant portion on the contacting parts of both terminals in Bellamy, as taught in Hayashi and Cowie. The suggestion or motivation for doing so would have been to prevent damage to both terminals as taught in Hayashi and Cowie and as is well known in the art.

Claims 6 and 7 are rejected for the reasons pertaining to claims 1-3.

Per claim 16, wherein each terminal includes a layer of arc suppressive material which is integral with conductive material, the material being bent into a suitable shape.

Per claim 17, the female terminal includes a leading end portion defining an opening through which the male terminal is coupled to the female terminal, and an arc suppressive layer is formed on an inner wall of the leading end portion (as taught in Hayashi and Cowie).

Per claim 18, the male terminal includes a tab portion and an arc suppressive portion which is integrally attached to the tab portion to cover a lead portion of the tab portion.

Claims 19 and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bellamy, Wutz, Hayashi, and Cowie as in claims 5, 6, 7, 16, 17, and 18 in view of Sakiyama et al. To the extent that the Bellamy terminal end is rounded as opposed to tapered, Sakiyama discloses a terminal where the tab portion and arc suppressive portion 4 are tapered toward the end. At the time of the invention, it would have been obvious to taper the end of the Bellamy terminal, as taught in Sakiyama. The

Art Unit: 2833

suggestion or motivation for doing so would have been to facilitate mating with the mating terminal, such motivation being well known in the art.

Regarding claims 9-11, to the extent that Bellamy does not state that the terminals are capable of use in an automotive vehicle, Sakiyama discusses the well known proposition that arc resistant terminals are useful in automotive applications (see Sakiyama col. 1). At the time of the invention, it would have been obvious to use the terminal discussed above in a vehicle. The suggestion or motivation for doing so would have been to prevent damage and arcing as taught in Sakiyama and as is well known in the art.

### ***Response to Arguments***

Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

Art Unit: 2833

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ross Gushi whose telephone number is (571) 272-2005. If attempts to reach the examiner by phone are unsuccessful, the examiner's supervisor, Paula A. Bradley, can be reached at 571-272-2800 extension 33. The phone number for the Group's facsimile is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
**ROSS GUSHI**  
**PRIMARY EXAMINER**